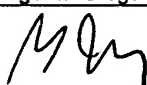



16367 U.S. PTO  
08/27/03

22278 U.S. PTO  
10/650240  
08/27/03

<b>UTILITY PATENT APPLICATION TRANSMITTAL</b> <small>(Only for new nonprovisional applications under 37 CFR 1.53(b))</small>		Attorney Docket No.: 19232.0011U1 First Inventor: Andreas Mühe Title: CRYSTAL-GROWING FURNACE, IN PARTICULAR A VERTICAL BRIDGMAN CRYSTAL-GROWING FURNACE OR A VERTICAL GRADIENT FREEZE CRYSTAL-GROWING FURNACE HAVING A JACKET HEATER AND A METHOD OF REGULATING THE HEAT OUTPUT OF THE JACKET HEATER Express Mail Label No.: EL992075877US		
<b>APPLICATION ELEMENTS</b> <small>See MPEP chapter 600 concerning utility application contents</small>		ADDRESS TO: Mail Stop PATENT APPLICATION Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450		
1. <input checked="" type="checkbox"/> <b>Specification</b> [Total Pages 13] <small>(Includes description, claims, and abstract)</small>		6. <input type="checkbox"/> <b>CD-ROM or CD-R</b> in duplicate, large tables or Computer Program (Appendix)		
2. <input checked="" type="checkbox"/> <b>Drawings</b> [Total Sheets 1]		<b>ACCOMPANYING APPLICATION PARTS:</b> 7. <input type="checkbox"/> Copy of Assignment 8. <input type="checkbox"/> 37 CFR 3.73(b) Statement (when there is an assignee) 9. <input type="checkbox"/> Power of Attorney 10. <input type="checkbox"/> English Translation Document (if applicable) 11. <input checked="" type="checkbox"/> Information Disclosure Statement (2 pages)/PTO-1449 (1 page) <input checked="" type="checkbox"/> Copies of IDS Citations [Total Citations 4] 12. <input checked="" type="checkbox"/> Preliminary Amendment (7 pages) 13. <input checked="" type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed) (18 pages) 14. <input type="checkbox"/> Nonpublication Request under 35 USC 122(b)(2)(B)(i) (Must attach form PTO/SB/35 or equivalent). 15. <input checked="" type="checkbox"/> Authorization to Treat Reply Requiring Extension of Time as Incorporating Petition for Extension of Time (2 pages) 16. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (1 card) 17. <input checked="" type="checkbox"/> Other: Certificate of Translation (1 page); Form PTO-2038 Credit Card Authorization in the amount of \$750.00 (1 page)		
3. <input checked="" type="checkbox"/> <b>Oath or Declaration</b> [Total Pages 3] a. <input checked="" type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 20B completed)				
4. <input type="checkbox"/> <b>Application Data Sheet.</b> See 37 CFR 1.76 [Total Pages ____]				
5. <input type="checkbox"/> <b>Nucleotide and/or Amino Acid Sequence Submission</b> (if applicable, all necessary) a. <input type="checkbox"/> Computer Readable Form (CRF) --OR-- <input type="checkbox"/> Statement under 37 CFR 1.821(e) (see Box 21 for statement) b. <input type="checkbox"/> Specification Sequence Listing on: i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or ii. <input type="checkbox"/> paper [Total Pages ____] c. <input type="checkbox"/> The contents of the computer readable form of the sequence listing and the sequence listing in the specification of the application are the same.				
18. The <b>FILING FEE</b> is calculated as follows: (Claims as filed, less any claims cancelled by Amendment)				
Claims	Number Filed	Number Extra	Rate	\$750.00 (Basic Fee)
Total claims	[ 9 ] - 20 =	0	X \$18.00	\$ 0.00
Independent claims	[ 3 ] - 3 =	0	X \$84.00	\$ 0.00
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ 280.00	\$
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$750.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees are reduced by 1/2.				\$
<b>TOTAL FILING FEE =</b>				\$750.00
19. <b>Payment:</b> <input type="checkbox"/> A check in the amount of \$_____ is enclosed. <input checked="" type="checkbox"/> Credit Card Payment Form PTO-2038 Authorizing Payment in the amount of \$750.00 is enclosed. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional amount due or credit any overpayment to Deposit Account No. 14-0629.				

20A.	<input checked="" type="checkbox"/>	This application is an original application ( <u>not</u> a continuation, divisional or continuation-in-part).
20B.	<input type="checkbox"/>	<p>This application is a <input type="checkbox"/> continuation-in-part / <input type="checkbox"/> continuation / <input type="checkbox"/> divisional of prior Application No. _____.</p> <p>The prior application was assigned to Examiner _____, Group Art Unit _____.</p> <p><b>The entire disclosure of the prior application is considered a part of the disclosure of the accompanying application and is hereby incorporated by reference.</b></p> <p><input type="checkbox"/> This application is a continuation or divisional application (<u>not</u> a continuation-in-part) that:</p> <ul style="list-style-type: none"><li>(i) names as inventors the same or fewer than all the inventors named in the prior application; and</li><li>(ii) contains no matter that would have been new matter in the prior application; and</li><li>(iii) a copy of the executed oath or declaration in the prior application, showing the signature or an indication thereon that it was signed: <div style="margin-left: 40px;"><input type="checkbox"/> is enclosed. <input type="checkbox"/> will follow.</div></li></ul> <p><input type="checkbox"/> This application is a continuation or divisional application (<u>not</u> a continuation-in-part) that is being filed by less than all the inventors named in the prior application. In accordance with 37 C.F.R. §1.63(d)(2), the Commissioner is requested to delete the name(s) of the following person who are not inventors of the invention being claimed in this application: _____</p> <p><input type="checkbox"/> This application is a continuation-in-part, continuation or divisional application naming an inventor not named in the prior application. A newly executed oath or declaration: <div style="margin-left: 40px;"><input type="checkbox"/> is enclosed. <input type="checkbox"/> will follow.</div></p>
21.	<input type="checkbox"/>	<p>A sequence listing in computer readable form in compliance with 37 C.F.R. §§ 1.821-1.825 was submitted on _____ in prior Application No. _____, filed _____.</p> <p>Pursuant to 37 C.F.R. § 1.821(e), applicant hereby requests that the computer readable form of the sequence listing submitted in the above-referenced prior application be used as the computer readable form of the sequence listing for the new application. The paper or compact disk copy of the Sequence Listing in the new application is identical to the computer readable copy filed in the prior application.</p>
22.	<input checked="" type="checkbox"/>	<p>This application claims foreign priority benefits under 35 USC 119(a)-(d) or 365(b) of any foreign application(s) listed below, or under 35 USC 365(a) or 365(b) of any PCT application listed below.</p> <p>Application No. <u>10239104.1</u> Country: <u>Germany</u> Day/Month/Year Filed: <u>August 27, 2002</u></p>
23. Address all correspondence to the address associated with: <span style="float: right;">CUSTOMER NO. 23859</span>		
Name of Attorney/Agent: Gregory J. Kirsch		Registration No.: 35,572
Signature: 		Date: <u>27 AUGUST 2003</u>
<p style="text-align: center;"><b>Certificate of Express Mailing Under 37 C.F.R. § 1.10</b></p> <p>I hereby certify that this correspondence, including any items indicated as attached or included, is being deposited with the United States Postal Service as Express Mail, Label No. EL992075877US, in an envelope addressed to: Mail Stop PATENT APPLICATION, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"><div style="width: 40%;"> _____ Michael Laird</div><div style="width: 40%; text-align: right;"><u>8/27/03</u> _____ Date</div></div>		

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	)	
Andreas Mühe	)	
Serial No.: Unassigned	)	Group Art Unit: Unassigned
Filed: Concurrently	)	Examiner: Unassigned
For: CRYSTAL-GROWING FURNACE, IN	)	Confirmation No.: Unassigned
PARTICULAR A VERTICAL BRIDGMAN	)	
CRYSTAL-GROWING FURNACE OR A	)	
VERTICAL GRADIENT FREEZE	)	
CRYSTAL-GROWING FURNACE	)	
HAVING A JACKET HEATER AND A	)	
METHOD OF REGULATING THE	)	
HEAT OUTPUT OF THE JACKET	)	
HEATER	)	

AUTHORIZATION TO TREAT REPLY REQUIRING EXTENSION OF TIME  
AS INCORPORATING PETITION FOR EXTENSION OF TIME

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

NEEDLE & ROSENBERG, P.C.  
Customer No.: 23859


Sir:

Pursuant to 37 C.F.R. §1.136(a)(3), the Commissioner is hereby requested and authorized to treat any concurrent or future reply in the above-identified application, requiring a petition for an extension of time for its timely submission, as incorporating a petition for extension of time for the appropriate length of time.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

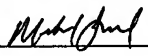
NEEDLE & ROSENBERG, P.C.

  
\_\_\_\_\_  
Gregory J. Kirsch  
Registration No. 35,572

NEEDLE & ROSENBERG, P.C.  
Customer No. 23859  
(404) 688-0770

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\_\_\_\_\_  
Michael Laird

8/27/03  
\_\_\_\_\_  
Date



TRANSPERFECT | TRANSLATIONS

City of New York, State of New York, County of New York

I, Holly Schneider, hereby certify that the following is, to the best of my knowledge and belief, a true and accurate translation of the German patent application from German into English.

ATLANTA  
BOSTON  
BRUSSELS  
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DALLAS  
FRANKFURT  
HONG KONG  
HOUSTON  
LONDON  
LOS ANGELES  
MIAMI  
MINNEAPOLIS  
NEW YORK  
PARIS  
PHILADELPHIA  
SAN DIEGO  
SAN FRANCISCO  
SEATTLE  
WASHINGTON, DC

Holly Schneider

Sworn to before me this

Tuesday, July 29, 2003

Signature, Notary Public

PAUL D. RALSTON  
Notary Public, State of New York  
No. 01RA6023867  
Qualified in Queens County  
Commission Expires May 3, 2007

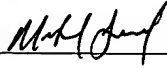
Stamp, Notary Public

**ATTORNEY DOCKET NO. 19232.0011U1**  
**Application No. Unassigned**

**CERTIFICATE OF EXPRESS MAILING UNDER 37 C.F.R. § 1.10**

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\_\_\_\_\_  
Michael Laird



\_\_\_\_\_  
Date

8/27/03